



Marsh harrier

Circus aeruginosus

Status

Red listed: HD, BR
Non-SPEC
Schedule 1 of WCA 1981
Annex I of EC Wild Birds Directive

National monitoring

National surveys: 1995, 2005.
Rare Breeding Birds Panel.

Population and distribution

The UK stronghold for breeding marsh harriers is the coast of East Anglia where there is the highest concentration of large reedbed sites, the favoured breeding habitat. In 1971, breeding marsh harriers had declined to only one pair at Minsmere in Suffolk, predominantly due to the effects of organochlorine pesticides (88–91 *Atlas*). Since these chemicals were banned, numbers have increased to an estimated 157–160 breeding females in the UK (*Population Estimates*).

Ecology

Although most nest in reedbeds, even quite small ones, marsh harriers have also nested in arable fields planted with wheat, barley, and oil-seed rape. The first young hatch about 30–35 days after the first egg is laid. The mean hatching date is 4 June and most eggs hatch between mid-May and mid-June, although hatching has been observed as late as the end of June. Young from the same brood fledge over a period of a few days, usually in the second and third week of July. The mean period between hatching and fledging is 40 days (Underhill-Day 1990).

Breeding season survey – population

This method is based on that used in the 1995 survey devised by John Underhill-Day.

Information required

- number of probable nesting sites
- number of confirmed nesting sites.

Number and timing of visits

At least three visits mid-April to mid-May to locate 'probable' nest-sites. A minimum of two mid-May to mid-June to confirm nesting.

Time of day

Any time of day.

Weather constraints

No weather constraints, although it is best to avoid extreme wet and windy conditions.

Sites/areas to visit

Reedbeds. Adjacent and/or coastal arable fields planted with tall-growing crops.

Equipment

- 1:25,000 field map of the survey area
- Schedule 1 licence.

Safety reminders

Nothing specific. See general health and safety advice in the *Introduction*.

Disturbance

Do not attempt to get close to the nest-site as marsh harriers are very easily disturbed and may desert if the nest is approached. Make all observations from a distance, preferably from a hide.

Methods

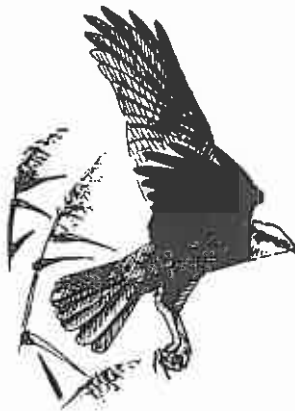
Make three visits during mid-April to mid-May to count the number of probable nesting sites. On each visit, observe potential nest-sites from a suitable vantage point for at least four hours.

A 'probable' nest-site is one at which one or both of the following observations are made:

- a female carrying nest material stays at a potential nest-site for an hour or more.
- a female stays at the nest-site for more than four hours and receives a prey delivery from the male during this time.

Observations of males carrying nesting material cannot be taken as evidence of probable nesting, as non-breeders will also carry nest material during this period.

Revisit all probable nest-sites during mid-May to mid-June to confirm breeding. Two observations of 2–3 hours at least two weeks apart at probable nest-sites should be sufficient, but make more if necessary. During these visits only, a 'confirmed' nest-site is one to which adults are observed bringing prey.



Breeding season survey – productivity

Information required

- number of fledged juveniles.

Number and timing of visits

At least two visits after 10 July.

Time of day

Any time of day.

Weather constraints

Avoid adverse weather conditions.



Sites/areas to visit, Equipment, Safety reminders

As for the population survey (above).

Disturbance

Do not attempt to get close to the nest-site as marsh harriers are very easily disturbed and may desert if the nest is approached. Make all observations from a distance, preferably from a hide.

Methods

Make two visits of at least 2–3 hours to each confirmed nest-site. Count the number of fledged young flying with the adults.

Visit probable nesting sites from late August onwards to look for eggs that failed to hatch, prey remains or any other clues to assess the outcome of the nesting attempt and possible reasons for failure.

Reference

Underhill-Day, J C (1990) The status and breeding biology of marsh harrier *Circus aeruginosus* and Montagu's harrier *Circus pygargus* in Britain since 1900. PhD thesis. RSPB and ITE.